



## Is Canada becoming a one-RIM wonder?

By Mark Betteridge

In Canada we've got 26 research parks. The pipelines in the emerging economies of India and China are each packed with 20 to 30 new research parks that are coming online in the next few years. At home, we've got one or two. If these numbers are indicative of any kind of trend, our R&D future may be in trouble. Canada may be en route to sacrificing its ability to create profitable world-class companies. We may even be at risk of becoming a one RIM wonder.

### **ARE WE SETTING OURSELVES UP FOR WHAT WE WANT?**

When we are unable to unroll the welcome mat to hopeful tenants because our research parks are full, one of two things inevitably happens: researchers bin their projects or take them elsewhere.

Brain drain is a persistent illness that claims our doctors south of the border. It is unrelenting, but it's not contagious. Canada's technology darling, Research In Motion, is the go-to example. It is headquartered in Waterloo, Ontario. It doesn't have offices in San Francisco or NYC, but that hasn't stopped the BlackBerry maker. Average sales grew 77% in the past three years and investors turned big profits with an average growth of 84% in earnings per share over the same period.

Canada can create booming businesses, yet some people are under the assumption the BlackBerry is American or Japanese-made. Forbes magazine stepped in over the summer to clear up any ambiguity and gave Canada a commercialization push when it named the Waterloo-based company as the world's fastest-growing.

### **BRAND IDENTITY, INTERNATIONAL POSITION**

It's no secret our nation has carved out its place as a commodity producer and exporter. Vast forests, seemingly infinite bodies of fresh water and cold winters filled with lots of fluffy, white snow are what foreigners think about when asked about Canada. Although in more recent history, we've been situating ourselves in a larger resources playing field with the incorporation of heavy oil, potash, diamonds and electricity exports.

We are firmly established in the natural resources sector, but the same cannot yet be said about our role in the knowledge economy. A dichotomy need not exist between the two; our natural resources and our R&D and S&T sectors are not required to be mutually exclusive. Sometimes they may not share commonalities, while other times they do, and we need them to.

For example, new technologies are being developed and implemented to create novel materials out of wood fibre and plastics. Ultraviolet coatings protect wood from harmful rays and advances in nanotechnology are responsible for the development of “smart materials”. It is the combination of Canada's resources — both of the natural and scholarly varieties — that will play an important role in our country's future. Natural resources are finite; ambition and innovation are not.

## **WHAT'S THE ROLE OF R&D AND COMMERCIALIZATION**

Does the international sphere think of research and development or tech innovations when it turns its thoughts to Canada? Recently, the news media in Europe has been covering the seal hunt and in North America the media is getting jazzed about the upcoming 2010 Winter Olympics. As it stands, we aren't yet known for fostering, accelerating and commercializing technology and knowledge-based industry. For that we need to take risks.

## **RISK, INVESTING & FARMING**

Tech investing is a bit like farming. We look at soils, micro-climates, sun-hours, topography, drainage and a host of local factors and only then decide what will grow to best meet our needs. We pick winners - literally. We don't always get it right but we learn from our missteps; ones that were based on the best research and information we had at the time.

Across the Pacific Ocean, China is not settling for lower goals, lower risks, lower returns and fast exits. It is betting big on solar power technology. Having cut the price of solar panels in half, Chinese companies are selling their products aggressively to North American markets for less than it costs to make them. Just as the Japanese did with the automobile market in the 80s, the Chinese are putting their mark on solar technology.

When people think about solar power technology, China comes to mind. This change means that Germany is now taking a backseat in both its manufacturing output and global standing when it used to be a worldwide market leader in solar tech.

China's government is a firm supporter of the endeavor. It knows the amount of energy its population is consuming is heading higher and higher. It is preparing for tomorrow. It is choosing to invest today.

The panels may or may not pan out. The point is that people are not sitting back and seeing what is offered; they are using the best information available, their experience and judgement to pick winners. There is no guarantee. They are learning as they go.

## **GO NORTH**

Clean energy technology is one of our near-immediate challenges. Arctic sovereignty, medical equipment and treatment innovation, our forests, water supply and fuel alternatives are on the same list. Our government needs to be involved so we don't fall farther behind in the technology continuum. Technology companies need to do their part too. That means going beyond innovation, laboratories and research parks and moving into the political process.

Many of the big decisions that affect the technology industry, and most others, are made by government. That is why it's so important for the government to see that this industry offers us our best and brightest future. Technology companies that engage in politics can be likened to organizations that are strategically investing in a marketing budget that has a very specific target audience.

The message here is that we don't want to be a one RIM wonder. Canada has a history of creating outstanding companies and we want to keep it that way. When tended with inquisitive minds, support structures and hope, our research, development, science and technology sector firmly establishes its roots into the future.

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